



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/036,796	01/07/2002	Michael P. Driscoll	3395-089 (WI 00-06)	4854

22429 7590 12/04/2003

LOWE HAUPTMAN GILMAN AND BERNER, LLP
1700 DIAGONAL ROAD
SUITE 300 /310
ALEXANDRIA, VA 22314

EXAMINER

CHUNG TRANS, XUONG MY

ART UNIT	PAPER NUMBER
----------	--------------

2833

DATE MAILED: 12/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

RF

Office Action Summary

Application No.

10/036,796

Applicant(s)

DRISCOLL ET AL.

Examiner

Xuong M. Chung-Trans

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) 1-22, 35, 36 and 48 is/are withdrawn from consideration.
- 5) ☐ Claim(s) 37-40, 42-47 and 52 is/are allowed.
- 6) ☒ Claim(s) 23-34, 41 and 49-51 is/are rejected.
- 7) ☐ Claim(s) 27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

Art Unit: 2833

1. Applicant's election without traverse of Group II claims 23-34, 37-47 and 49-52 in Paper No. 6 is acknowledged.

2. Claims 1-22, 35, 36 and 48 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 6.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 23, 26, 33-34, 41 and 50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claims 23 and 50, the term "said electrically conductive jacket" lacks antecedent basis.

As per claim 26, the term "said first and said second interposers" lacks antecedent basis.

As per claim 33-34, the term "said central cable" lacks antecedent basis.

As per claim 41, the term "said shielding members" lacks antecedent basis.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2833

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 23, 25-26, 29, 32 and 50, as best understood, are rejected under 35 U.S.C. 102(b) as anticipated by Schumacher (U.S. Pat. No 5,823,795).

As per claims 23, 25, and 50, Schumacher discloses a connector substantially as claimed, comprising: a twinax cable (10,12) having two electrical conductors (42,44), a dielectric, and an electrical conductive layer (46,48), a first and second shielding members (54,56) in electrical contact with an end of the conductive jacket and a first and second conductive elements (50,52) each in contact with a corresponding one exposed end of the conductor, wherein the twinax cable has an elliptical cross-section and a latching mechanism including a latching device (34,36,38,40,72,74).

As per claim 26, Schumacher teaches the exposed ends of the twinax cable extend into the first and second interposers (14,16).

As per claim 29, Schumacher teaches a cable housing (18) for housing the twinax cable.

As per claim 32, Schumacher teaches the electrical connector has an impedance of approximately 100 ohms (col. 2, lines 57-60).

7. Claim 49 is rejected under 35 U.S.C. 102(a) as being anticipated by Kieninger, Hans (EP 1 087466 A2).

As per claim 49, Kieninger discloses an electrical connector (10) for mounting to a PCB (11) having a guide pin (26) as claimed, comprising: a housing (16) including a plurality of signal paths (19); and a latching mechanism (23) including a latching device in the housing for latching onto the guide pin.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schumacher (U.S. Pat. No 5,823,795) in view of applicant admitted prior art (background of the invention page 2).

As per claim 24, Schumacher discloses a connector substantially as claimed except for carries signals having data speed exceeding 5 Gb/sec. However, the use of signal path for carries signals at the data speed between 5-10 Gb/sec and greater is well known in the art as admitted by applicant. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to include such data transfer rate in the Schumacher connector in order to provide high speed signal transfer rate as needed.

Art Unit: 2833

10. Claims 28, 30-31, 33-34 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schumacher in view of Sturdivant et al. (U.S. Pat. No 5,552,752).

As per claims 28, 30-31 and 51, Schumacher does not explicitly disclose the shielding members are conductive spring elements, and the conductive spring elements are conductive spring. Sturdivant, however, discloses such conductive spring (abstract). Therefore, it would have been obvious to one skilled artisan at the time the invention was made to include the teaching of Sturdivant in the Schumacher invention in order to make a reusable solderless interconnections and thereby provide connection of high integrity and reliability.

As per claims 33-34, Schumacher does not explicitly disclose the shielding member provide 360 degree or less than 360 degree shielding of the cable. It would have been obvious to one skilled artisan at the time the invention was made to provide such 360 degree or less than 360 degree shield around the cable to minimize EMI radiation and/or cross talk problem and thereby enhance the performance of the connector.

11. Claim 27 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 37-40, 42-47 and 52 are allowed.

Art Unit: 2833

Claim 41 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not teach or suggest the use of a first and second interposer movable slides biased in a direction away from the first and second interposer and receiving an opposite end of the conductors and having a retracted position and a normal extended position and the conductive spring elements are protected by the first and second interposer slide.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xuong M. Chung-Trans whose telephone number is (703) 305-9772. The examiner can normally be reached on Monday from 9:30am to 1:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Bradley, can be reached on (703) 308-2319. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 305-3900.



X. Chung-Trans

Hien Vu
Primary Examiner